ABSTRACT OF THE DISCLOSURE

A liquid crystal display includes: a liquid crystal panel assembly including gate lines, data lines, and pixels connected to the gate lines and the data lines; a signal controller receiving image data, a vertical synchronization signal, a horizontal synchronization signal, and a data enable signal, generating control signals used for driving the panel assembly, counting the number of pulses of the horizontal synchronization from a pulse of the vertical synchronization signal to a subsequent pulse of the data enable signal pulse, and generating a vertical synchronization start signal having a main-charging pulse in synchronization with the subsequent pulse of the data enable signal pulse and a precharging pulse before the main-charging pulse; a gate driver for activating the pixels based on the precharging pulse and the main-charging pulse; and a data driver receiving the image data from the signal controller and writing the image data on the activated pixels.